

REMARKS

Claim 1 has been amended. Support for the amendment can be found, for example, on page 13, lines 2-9 of the specification.

Upon entry of the Amendment, claims 1-3 will be pending.

Claim 3 has been withdrawn from consideration.

Claims 1-2 have been rejected under 35 U.S.C. § 103 as allegedly being unpatentable over McAmish et al., U.S. Patent No. 6,811,643 (“McAmish”) in view of Sugimoto et al., U.S. Patent No. 4,472,328 (“Sugimoto”) and further in view of Soji et al., JP 10-330520 (“Soji”) or alternatively over Soji in view of McAmish and further in view of Sugimoto.

Claims 1-2 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over McAmish et al., Sugimoto et al., and Soji et al., or alternatively, Soji et al., McAmish et al. and Sugimoto et al. as applied to claim 1 above and further in view of Takata et al., U.S. Patent No. 6,884,836 (“Takata”).

In the Non-Final Office Action dated January 10, 2006, the Examiner rejected claims 1-2 under 35 U.S.C. § 103(a) as allegedly being obvious based on McAmish et al., U.S. Patent No. 6,811,643 (“McAmish”) in view of Hutson et al., U.S. Publication No. 2003/0105446 (“Hutson”). The Examiner rejected claims 1-2 under 35 U.S.C. § 103(a) as allegedly being obvious over McAmish and Hutson further in view of Takata et al., U.S. Patent No. 6,884,836 (“Takata”). The Examiner also rejected claims 1-2 under 35 U.S.C. § 103(a) as allegedly being obvious over McAmish and Hutson and further in view of Sugimoto et al., U.S. Patent No. 4,472,328 (“Sugimoto”).

As stated on page 2 of the Non-Final Office Action dated September 15, 2006, the Examiner withdrew all the rejections set forth in the Non-Final Office Action dated January 10, 2006 (which include rejections based on a combination of the McAmish reference and the Sugimoto reference or the Takata reference) based on the arguments presented in the Response under 37 C.F.R. § 1.111 filed July 7, 2006.

In Non-Final Office Action dated September 15, 2006, the Examiner rejects claims 1-2 under 35 U.S.C. § 103(a) based on McAmish and Sugimoto and based on McAmish, Sugimoto and Takata again, but the Examiner additionally cites a new reference, Soji et al., JP 10-330520.

To establish *prima facie* obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art must teach or suggest all the claim limitations.

Claim 1 of the present invention is directed to a method for producing a laminated porous polyolefin film comprising at least three steps recited in claim 1. In claim 1, “the surface of the temperature of each thermosetting portion is adjusted to a temperature higher than the melting point of the polyolefin resin by from 5 to 25°C during the lamination.”

Applicants submit that McAmish, Sugimoto and Takata do not teach or suggest that the surface of the temperature of each thermosetting portion is adjusted to a temperature higher than the melting point of the polyolefin resin by from 5 to 25°C during the lamination for at least the reasons set forth in the Response under 37 C.F.R. § 1.111 filed July 7, 2006, which persuaded

the Examiner to withdraw the previous rejections based on the combination of McAmish and Sugimoto and the combination of McAmish and Takata (the Examiner admits this deficiency in McAmish on page 4 of the Non-final Office Action dated September 15, 2006). Applicants submit that Soji does not make up for this deficiency in McAmish, Sugimoto and Takata.

Soji (JP 10-330520) discloses a method for producing a porous film by superposing at least two thermoplastic films on each other, integrating them by heating, and then uniaxially stretching the integrated film to make it porous (see, for example, paragraph [0009]). Soji teaches use of conventional lamination rolls, heated metal plates, etc. (see, paragraph [0026]).

As the Examiner points out, Soji teaches that the heating temperature of the tool is adjusted to be within a range of $\pm 20^{\circ}\text{C}$ the melting point of the resin that has the lowest melting point (paragraph [0010] and [0024]).

In contrast, currently amended claim 1 recites that “the surface temperature of each thermocompressing portion is adjusted to a temperature of higher than the melting point of the polyolefin resin by from 5 to 25°C during the lamination...wherein the polyolefin resin is composed of two or more components and the melting point of the polyolefin is defined to be the highest peak temperature determined by DSC.”

In Soji, the heating temperature is determined on the basis of the melting point of the resin that has the lowest melting point, whereas in the present invention, the surface temperature of a thermosetting portion is determined on the basis of the melting point that is defined to be the highest peak temperature by DSC of the polyolefin resin which comprises two or more components. In other words, in the present invention the surface temperature of the

thermosetting portion is determined on the basis of the melting point of the component having the highest melting point.

Applicants direct the Examiner's attention to the working examples in Soji, which have been reproduced in the table below:

Example No.	Resin 1		Resin 2		Roll temperature
	substance	mp.	substance	mp.	
1	high density PE	132°C	None	--	124°C
2	high density PE	132°C	None	--	124°C
3	high density PE	132°C	None	--	124°C
4	isotactic PP	166°C	high density PE	137°C	147°C
5	(Outer layers) Isotactic PP	167°C	(Outer layers) high density PE	132°C	124°C
	(Intermediate layer) Isotactic PP	167°C	(Intermediate layer) None	--	

As shown above, in each example in Soji which uses a combination of two or more resins (i.e., Examples 4 and 5), the roll temperature is lower than the melting point of the higher melting resin.


In view of the foregoing and for the reasons set forth in the Response under 37 C.F.R. § 1.111, it is clear that McAmish, Sugimoto and Takata do not teach or suggest all the elements of the claimed invention. Moreover, Soji does not make up for the deficiencies of McAmish, Sugimoto or Takata. Accordingly, claims 1 and 2 would not have been obvious based on McAmish in view of Sugimoto and further in view of Soji or alternatively over Soji, in view of McAmish and Sugimoto. Moreover, claims 1-2 would not have been obvious based on McAmish, Sugimoto and Soji, or alternatively, over Soji, McAmish and Sugimoto further in

view of Takata. Reconsideration and withdrawal of each of the foregoing rejections is respectfully requested.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,


Jennifer R. Leach
Registration No. 54.257

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: March 14, 2007